```
Set
       Items
               Description
              VACUUM? ? OR EVACU? OR VACUA? OR NEGATIV?()PRESSUR? OR
S1
     1598879
AS-
            PIRAT? OR (AIR OR RESPIR?()(GAS OR GASES OR GASSES) OR
AIRFL-
             OW) (5N) (WITHDRAW? OR EVACUAT? OR REMOV? OR PUMP???(3N)OUT
OR -
            SUCTION OR SUCK???)
      151937 CHEST OR THORACIC OR THORAX OR INTRATHORA?
EXTRATHOR-
            AC? OR EXTRATHORAX? OR BRONCH? OR PLEURA? OR LUNG? ? OR
PUL-
            M? OR INTRAPLEURA? OR INTRATHORA? OR PNEUMOTHORA? OR
PNEUMO-
             () THORA? OR PNEUMON? OR RESPIR? OR PLEURODES? OR AIRWAY?
S3
       88220
                S1(10N)S2
S4
       117491 HEART OR HEARTS OR CARDIO? OR CARDIA? OR PULSE OR
HEARTRA-
             TE? ? OR HEARBEAT? OR ATRI?? OR VENTRIC? OR CORONARY OR
BLOOD-
             ()(CIRCULATION OR PRESSURE) OR CIRCULATORY OR VASCULA? OR
MYO-
            CARD?
S.5
        6665 S3(20N)S4
S6
        1791 S5/2005:2010
         4874 S5 NOT S6
       392057 ENHANC? OR AUGMENT? OR ELEVATE? ? OR ELEVATI? OR
HEIGHTEN?
             OR INCREAS? OR INTENSIF? OR MAGNIFY OR RAISE? ? OR
RAISING OR
             REINFORC? OR STRENGTHEN? OR STRONGER OR BOOST???
S9
        11216
               S4(10N)S8
S10
         355
                S7(40N)S9
S11
         161
               RD (unique items)
? show files
```

File 155:MEDLINE(R) 1950-2010/Feb 26 (c) format only 2010 Dialog 5:Biosis Previews(R) 1926-2010/Feb W3 File (c) 2010 The Thomson Corporation File 73:EMBASE 1974-2010/Mar 01 (c) 2010 Elsevier B.V. File 972:EMBASE 1947-2010/Mar 01 (c) 2010 Elsevier B.V. File 2:INSPEC 1898-2010/Feb W3 (c) 2010 The IET File 6:NTIS 1964-2010/Feb W5 (c) 2010 NTIS, Intl Cpyrght All Rights Res File 8:Ei Compendex(R) 1884-2010/Feb W3 (c) 2010 Elsevier Eng. Info. Inc. File 35:Dissertation Abs Online 1861-2010/Jan (c) 2010 ProQuest Info&Learning File 136:BioEngineering Abstracts 1966-2007/Jan

```
(c) 2007 CSA.
File 65:Inside Conferences 1993-2010/Mar 01
         (c) 2010 BLDSC all rts. reserv.
File 99: Wilson Appl. Sci & Tech Abs 1983-2010/Dec
         (c) 2010 The HW Wilson Co.
File 91:MANTIS(TM) 1880-2010/Feb
         2001 (c) Action Potential
File 164:Allied & Complementary Medicine 1984-2010/Feb
          (c) 2010 BLHCIS
File 467:ExtraMED(tm) 2000/Dec
         (c) 2001 Informania Ltd.
File 144: Pascal 1973-2010/Feb W2
         (c) 2010 INIST/CNRS
File 23:CSA Technology Research Database 1963-2010/Jan
        (c) 2010 CSA.
File 34:SciSearch(R) Cited Ref Sci 1990-2010/Feb W3
         (c) 2010 The Thomson Corp
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 2006 The Thomson Corp
File 198: Health Devices Alerts (R) 1977-2007/May W3
         (c) 2007 ECRI-nonprft agncy
File 162:Global Health 1983-2010/Feb W3
         (c) 2010 CAB International
File 47: Gale Group Magazine DB(TM) 1959-2010/Feb 05
        (c) 2010 Gale/Cengage
File 9:Business & Industry(R) Jul/1994-2010/Feb 27
        (c) 2010 Gale/Cengage
File 16:Gale Group PROMT(R) 1990-2010/Feb 27
         (c) 2010 Gale/Cengage
File 160:Gale Group PROMT(R) 1972-1989
         (c) 1999 The Gale Group
File 369: New Scientist 1994-2010/Feb W4
         (c) 2010 Reed Business Information Ltd.
File 370:Science 1996-1999/Jul W3
         (c) 1999 AAAS
File 444: New England Journal of Med. 1985-2010/Feb W3
         (c) 2010 Mass. Med. Soc.
File 457: The Lancet 1992-2010/Feb W2
         (c) 2010 Elsevier Limited. All rights res
```

11/3,K/5 (Item 5 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

15651724 **PMID:** 12947026

Stretch activates nitric oxide production in pulmonary vascular endothelial cells in situ.

Kuebler Wolfgang M; Uhlig Ulrike; Goldmann Torsten; Schael Gregor; Kerem Alexander; Exner Kay; Martin Christian; Vollmer Ekkehard; Uhlig Stefan Division of Pulmonary Pharmacology, Research Center Borstel, Borstel, Germany. American journal of respiratory and critical care medicine (United States) Dec 1 2003, 168 (11) p1391-8. ISSN: 1073-449X--Print Journal Code: 9421642

Publishing Model Print-Electronic

**Document type:** In Vitro; Journal Article; Research Support, Non-U.S. Gov't

Languages: ENGLISH
Main Citation Owner: NLM

**Record type:** MEDLINE; Completed

...oxide (NO) by the endothelial nitric oxide synthase (eNOS) in two different models of vascular stretch in the intact lung: In isolated-perfused rat lungs, **vascular** stretch was induced by **elevation** of **vascular** pressure. In situ digital fluorescence microscopy revealed stretch-dependent NO production, which was localized to capillary endothelial cells and inhibited by NOS blockers. In isolated-perfused mouse **lungs**, **vascular** stretch was generated by ventilation with **elevated negative pressure**. Stretch-induced phosphorylation of Akt and eNOS in **lung** endothelial cells was demonstrated by immunohistochemistry and increased NO production by in situ fluorescence microscopy. Stretch-induced endothelial responses in both models were abrogated by... (

11/3,K/8 (Item 8 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

15206565 **PMID:** 12556262

Evaluation of a prototypic inspiratory impedance threshold valve designed to enhance the efficiency of cardiopulmonary resuscitation.

Lurie Keith G; Barnes Thomas A; Zielinski Todd M; McKnite Scott H Cardiac Arrhythmia Center, Cardiovascular Division, Department of Medicine, University of Minnesota Medical School, Minneapolis 55455, USA. lurie002@tc.umn.edu.

Respiratory care (United States) Jan 2003, 48 (1) p52-7, ISSN: 0020-1324--Print

**Journal Code:** 7510357 Publishing Model Print

**Document type:** Journal Article

Languages: ENGLISH

**Main Citation Owner: NLM** 

Record type: MEDLINE; Completed

OBJECTIVE: Assess a prototype inspiratory impedance threshold valve (ITV) designed

to enhance vital organ circulation during standard and active

compression/decompression **cardiopulmonary** resuscitation (CPR). BACKGROUND: The ITV attaches to commonly used airway assist devices and decreases intrathoracic pressure during the decompression (**chest** recoil) phase of CPR by creating a **vacuum** within the **thorax**, which **increases** venous blood flow to the **heart** and thus **increases coronary** perfusion pressure and blood flow to the brain. METHODS: The evaluation included laboratory bench testing, according to American Society for Testing and Materials (ASTM) and... (

11/3,K/16 (Item 16 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

13682527 **PMID:** 10722860

Effects of positive intrathoracic pressure on pulmonary and systemic hemodynamics.

Tyberg J V; Grant D A; Kingma I; Moore T D; Sun Y; Smith E R; Belenkie I Department of Medicine, University of Calgary, 3330 Hospital Drive NW, Calgary, Canada. jtyberg@ucalgary.ca

Respiration physiology (NETHERLANDS) Feb 2000, 119 (2-3) p171-9, ISSN:

0034-5687--Print **Journal Code:** 0047142

Publishing Model Print

**Document type:** Journal Article; Review

Languages: ENGLISH
Main Citation Owner: NLM

**Record type:** MEDLINE; Completed

...to measure end-diastolic volume directly or to calculate end-diastolic transmural pressure, which requires that pericardial pressure be known. Under most normal circumstances, increased **intrathoracic** pressure (and other interventions, such as vasodilators or lower-body **negative pressure**, that decrease central blood volume) decreases the transmural end-diastolic pressures of both **ventricles**, their end-diastolic volumes and stroke work. However, when ventricular interaction is significant, the effects of these interventions might be quite different; this may be important in patients with **heart** -failure. Although these interventions decrease RV transmural pressure, they may **increase** LV transmural pressure, end-diastolic volume, and thus stroke work by the Frank-Starling mechanism. (

11/3,K/27 (Item 27 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

12271961 **PMID**: 9389191

[Improvement of coronary flow by artificial decending the intrathoracic pressure]

Zhang T; Fu C Y; Huang Z F; Niu X

Department of Arterioslerosis, Beijing Heart Lung Blood Vessel Research Center. Sheng li xue bao - Acta physiologica Sinica (CHINA) Jun 1996, 48 (3) p307-10,

**ISSN:** 0371-0874--Print **Journal Code:** 20730130R

Publishing Model Print

**Document type:** English Abstract; Journal Article

**Languages:** CHINESE **Main Citation Owner:** NLM

Record type: MEDLINE; Completed

In simulating the changes of intrathoracic pressure during deep inhalation, the

intrathoracic pressure was descended by repeated aspiration from thoracic cavity in 8 dogs. The volume of coronary flow was observed simultaneously. It was found that when intrathoracic pressure was dropping the coronary flow volume showed an increase as a result of decrease of right atrium pressure and increase of a orta pressure, thus creating an increased pressure difference between inflow and outflow of coronary circulation. (

11/3,K/28 (Item 28 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

12136036 **PMID:** 8901719

Negative-pressure ventilation improves cardiac output after right heart surgery.

Shekerdemian L S; Shore D F; Lincoln C; Bush A; Redington A N Department of Pediatrics, Royal Brompton Hospital, London, UK.

Circulation (UNITED STATES) Nov 1 1996, 94 (9 Suppl) pII49-55, ISSN: 0009-

7322--Print **Journal Code:** 0147763

Publishing Model Print

Document type: Journal Article; Research Support, Non-U.S. Gov't

Languages: ENGLISH

**Main Citation Owner: NLM** 

**Record type:** MEDLINE; Completed

...positive-pressure ventilation and after 15 minutes of negative-pressure ventilation. Negative-pressure ventilation improved the cardiac output by a mean of 46% (P = .005). **Heart** rate did not change, and stroke volume **increased** by a mean of 48.5% (P = .005). Mixed venous saturation increased by 4.6% (P < .02), and consequently arteriovenous oxygen content difference fell significantly (P = .01). The systemic and **pulmonary vascular** resistances were reduced significantly during **negative-pressure** ventilation (P < .05 and P < .03, respectively). CONCLUSIONS: Negative-pressure ventilation improves **cardiac** output in children after total cavopulmonary connection and tetralogy of Fallot repair and may prove to be an important therapeutic option in children with the... (

11/3,K/49 (Item 49 from file: 155) DIALOG(R)File 155: MEDLINE(R)

(c) format only 2010 Dialog. All rights reserved.

07549335 **PMID:** 6472966

Effect of pneumothorax-induced systemic blood pressure alterations on the cerebral circulation in newborn dogs.

Batton D G; Hellmann J; Nardis E E

Pediatrics (UNITED STATES) Sep 1984, 74 (3) p350-3, ISSN: 0031-4005--Print

**Journal Code:** 0376422 Publishing Model Print

**Document type:** Journal Article

Languages: ENGLISH
Main Citation Owner: NLM

**Record type:** MEDLINE; Completed

...to 10 seconds) of air to reduce mean arterial blood pressure to half of base-line levels. Both methods of pneumothorax induction resulted in significant **elevations** of central venous pressure and intrapleural pressure, whereas mean arterial blood pressure and cerebral blood velocity decreased significantly. In each group, the pneumothorax was **evacuated** either by slow **withdrawal** of **air** (10 cc/kg/min) or as rapidly as possible. Rapid evacuation of air resulted in an immediate **increase** in mean arterial **blood pressure** and cerebral blood velocity to supranormal levels. Slow evacuation led to a more gradual normalization of mean arterial **blood pressure** and cerebral blood velocity. It is suggested that the precipitous **increases** in mean arterial **blood pressure** and cerebral blood velocity following rapid **evacuation** of a tension **pneumothorax** may account for the observed association between pneumothorax and intraventricular hemorrhage in premature infants. (

11/3,K/49 (Item 49 from file: 155) DIALOG(R)File 155: MEDLINE(R)

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07549335 **PMID:** 6472966

Effect of pneumothorax-induced systemic blood pressure alterations on the cerebral circulation in newborn dogs.

Batton D G; Hellmann J; Nardis E E

Pediatrics (UNITED STATES) Sep 1984, 74 (3) p350-3, ISSN: 0031-4005--Print

**Journal Code:** 0376422 Publishing Model Print

**Document type:** Journal Article

Languages: ENGLISH
Main Citation Owner: NLM

**Record type:** MEDLINE; Completed

...to 10 seconds) of air to reduce mean arterial blood pressure to half of base-line levels. Both methods of pneumothorax induction resulted in significant **elevations** of central venous pressure and intrapleural pressure, whereas mean arterial blood pressure and cerebral blood velocity decreased significantly. In each group, the pneumothorax was **evacuated** either by slow **withdrawal** of **air** (10 cc/kg/min) or as rapidly as possible. Rapid evacuation of air resulted in an immediate **increase** in mean arterial **blood pressure** and cerebral blood velocity to supranormal levels. Slow evacuation led to a more gradual normalization of mean arterial **blood pressure** and cerebral blood velocity. It is suggested that the precipitous **increases** in mean arterial **blood pressure** and cerebral blood velocity following rapid **evacuation** of a tension **pneumothorax** may

account for the observed association between pneumothorax and intraventricular hemorrhage in premature infants. (

11/3,K/75 (Item 21 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

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0001801032 **Biosis No.:** 19674800085038

An evaluation of the negative phase of a volume-limited ventilator

Author: AUCHINCLOSS J HOWLAND; GILBERT ROBERT

Author Address: Upstate Med. Center, State Univ. N. Y., Syracuse, N. Y., USA

**Journal:** AMER REV RESP DE 95 ( (1) ): p 66-72 1967 1967

**Document Type:** Article **Record Type:** Abstract **Language:** Unspecified

**Abstract:** Eight seriously ill patients, requiring mechanical aid to ventilation and presenting problems in maintenance of **blood pressure** of varying degrees of severity, were studied by determining the effect of imposition of **negative pressure** during the expiratory phase of **respiration** on **cardiac** output while ventilation was maintained at constant levels. Peak negative values of 4 to 15 cm of water were achieved. **Increase** in **cardiac** output was observed in only one instance. The use of the negative phase in the type of clinical material studied is considered lacking in critical...

11/3,K/80 (Item 26 from file: 5)

DIALOG(R)File 5: Biosis Previews(R)

(c) 2010 The Thomson Corporation. All rights reserved.

0001120109 **Biosis No.:** 19613600030017

An improved heart-lung preparation ventilated by negative pressure

Author: SHEEHAN WILLIAM L; KINZIE WILLIAM B; WESTBROOK KENNETH

L; SPENCER WILLIAM A; HOFF HEBBEL E **Author Address:** Baylor U., Houston, Texas

**Journal:** JOUR APPL PHYSIOL 16 ((1)): p 186-190 1961 1961

Document Type: Article Record Type: Abstract Language: Unspecified

**Abstract:** Five isolated canine **heart-lung** preparations were successfully ventilated with intermittent **negative pressure** in a specially constructed chamber. Improved **cardiopulmonary** dynamics resulted in **increased** survival time and improved

performance of all preparations. Results obtained with these preparations exceed most of the others reported in the literature. ABSTRACT AUTHORS: Authors

11/3,K/81 (Item 27 from file: 5)
DIALOG(R)File 5: Biosis Previews(R)

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0001107004 **Biosis No.:** 19613600016911

Hemodynamic effects of continuous positive and negative pressure breathing in normal man

**Author:** KILBURN KAYE H; SIEKER HERBERT O **Author Address:** Duke U Sch. Med., Durham, N. C.

**Journal:** CIRCULATION RES 8 ( (3) ): p 660-669 1960 1960

**Document Type:** Article **Record Type:** Abstract **Language:** Unspecified

**Abstract:** ...in central blood volume were made by the dye dilution method, by measurement of lung blood density albumin, and by the determination of change in **pulmonary** vein and **heart** size. **Negative pressure** breathing at -20 to -22 cm H2O **increased cardiac** index from 2.6 to 3.4 1/min./m2 and at -12 to -14 cm H2O from 2.8 to 4.0 1/min./m. The change was the result of an **increase** in stroke volume or **heart** rate. No significant **increase** in central blood volume could be determined by the quantitative methods used, but the heart and pulmonary veins increased in size. Positive pressure breathing caused...

11/3,K/84 (Item 30 from file: 5) DIALOG(R)File 5: Biosis Previews(R)

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0000802018 **Biosis No.:** 19542800025782

The effect of positive and negative pressure respiration on unilateral pulmonary blood flow in the open chest

Author: ANKENEY J L; HUBAY C A; HACKETT P R; HINGSON R A

Author Address: Western Res. U., Cleveland

**Journal:** SURG GYNECOL AND OBSTET 98 ( (5) ): p 600-606 1954 1954

Document Type: Article Record Type: Abstract Language: Unspecified

**Abstract:** In the open chest, positive pressure lung inflation interferes with circulation. This depression of the circulation under the conditions of the expt. is due to **increased** 

**pulmonary vascular** resistance. **Negative pressure lung** deflation does not **augment** the circulation in the open **chest** as has been observed in the intact chest. The pressure profile which least interferes with circulation should be 1/3 positive pressure with an abrupt...

11/3,K/92 (Item 38 from file: 5)
DIALOG(R)File 5: Biosis Previews(R)
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0000140734 **Biosis No.:** 19290300006296

Negative pressure pulmonary ventilation in the heart lung preparation

**Author:** DALY I de BURGH

**Journal:** JOUR PHYSIOL 63 ( (1) ): p 81-93 1927 1927

Document Type: Article Record Type: Abstract Language: Unspecified

**Abstract:** The closed circuit **heart-lung** preparation previously described by the author is ventilated by a **negative pressure** apparatus. In confirmation of Mollgaard's experiments on the whole animal it is found that a reduction in the mean intrathoracic pressure **increases** the total output of the **heart**. Intrathoracic pressures down to 400 mm. Hg are not injurious to the heart. The factors determining the mean venous pressure under the experimental conditions are ...

11/3,K/112 (Item 19 from file: 73) DIALOG(R)File 73: EMBASE (c) 2010 Elsevier B.V. All rights reserved.

0070029937 **EMBASE/MEDLINE No:** 1974029974 **Effect of negative pressure breathing on lung compliance** 

Goldberg H.; Menkes H.; Ball W.; et-al

Johns Hopkins Univ., Baltimore, Md. 21205, United States

Corresp. Author/Affil: : Johns Hopkins Univ., Baltimore, Md. 21205, United States

Federation Proceedings (FED. PROC.) December 1, 1973, 32/3 (I)

**CODEN:** FEPRA **ISSN:** 0014-9446

**Document Type:** Journal **Record Type:** Abstract

Language: English

During negative pressure breathing there is an **increase** in arterial **blood pressure** relative to pleural pressure. This represents an **increase** afterload on the left **ventricle**, which leads to an **increase** in the transmural pressure of the left **atrium**, an **increase** in pulmonary venous pressure, and pulmonary congestion. Pulmonary congestion is associated with a decrease in **lung** compliance. In 5 normal subjects breathing at **negative pressures** of -10 to -30 mm Hg, a fall in compliance was observed of of 17%-37%

occurring within 10 seconds after exposure to the negative... ... The transient changes in venous return during negative pressure breathing have been shown to be small and are considered unrelated to the observed changes in **lung** compliance. It is believed that the fall in compliance during **negative pressure** breathing is related to the **pulmonary** congestion caused by an **increased** afterload on the left **ventricle**.

11/3,K/119 (Item 7 from file: 972) DIALOG(R)File 972: EMBASE (c) 2010 Elsevier B.V. All rights reserved.

0035742044 **EMBASE/MEDLINE No:** 2008986025C

The use of suction in clinical medicine

Rosen M.; Hillard E.K.

Dept. of Anaesth., Roy. Infirm., Cardiff, S. Wales

Corresp. Author/Affil: Rosen M.: Dept. of Anaesth., Roy. Infirm., Cardiff, S. Wales

British journal of anaesthesia (Brit. J. Anaesth.) December 1, 1960, 32/10 (486-504)

ISSN: 0007-0912

Document Type: Journal; Article Record Type: Abstract

Language: English Summary language: English

...a result, the lung volume is reduced and massive atelectasis may occur. The pressure in the trachea, bronchi, and alveoli may become negative. This produces **increased** venous return and dilation of great veins and the right **heart**, and may be the cause of sudden death during endotracheal suction (with a possible anoxic **heart**). Large **negative pressures** in the **lungs** may be avoided if the suction catheter has an outside diameter of not more than half the inside diameter of the airway, or include a...

11/3,K/124 (Item 12 from file: 972) DIALOG(R)File 972: EMBASE (c) 2010 Elsevier B.V. All rights reserved.

0015187087 **EMBASE/MEDLINE No:** 2007224044C

Circulatory effects of the body respirator

Maloney Jr. J.V.; Whittenberger J.L.

American Journal of Medicine (Amer. J. Med.) December 1, 1950, 8/3 (393)

**ISSN:** 0002-9343

**Document Type:** Journal ; Article **Record Type:** Abstract

Language: English Summary language: English

In clinical and animal experiments it has been found that the **negative-pressure** tank

**respirator** produces impairment of circulation, decreased **cardiac** output, **increase** in cerebral venous and c.s.f. pressure, rise in venous pressure, increased filling of the venous bed and arteriolar constriction.

```
11/3,K/129 (Item 1 from file: 144)
DIALOG(R)File 144: Pascal
(c) 2010 INIST/CNRS. All rights reserved.
  14376323
            PASCAL No.: 00-0028989
  Role of breathing on cardiac performance : experimental and
mathematical
models
 Physiology and function from multidimensional images : San Diego CA,
21-23 February 1999
  TRAN B Q; HOFFMAN E A
  CHIN-TU CHEN, ed; CLOUGH Anne V, ed
  Dept. of Biomedical Engineering, Catholic Univ. of America,
Washington DC
20064, United States; Dept. of Radiology, Univ. of Iowa, Iowa City, IA
52242, United States
  International Society for Optical Engineering, Bellingham WA, United
States.; American Association of Physicists in Medicine, Chicago IL,
United
States.; American Physiological Society, United States.; Food and Drug
Administration, Washington DC, United States.; Society for Imaging
Science
and Technology, Springfield VA, United States.; National Electrical
Manufacturers Association, Washington DC, United States.; Radiological
Society of North America, Oak Brook IL, United States.; Society for
Computer Applications in Radiology, Unknown.
  Physiology and function from multidimensional images. Conference
(San
Diego CA USA) 1999-02-21
  Journal: SPIE proceedings series, 1999
, 3660 150-158
 Language: English
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  ... studies using EPI. Results show that positive pressure
mechanical
ventilation timed to systolic events may increase SV and CO by up to
mainly by
             increased filling of the ventricles during
            Similarly, negative pressure (spontaneous)
diastole.
respiration has its greatest effect on ventricular diastolic
filling. Cardiac-gated mechanical ventilation may provide sufficient
cardiac augmentation to warrant further investigation as a
minimally-invasive technique for
                                      temporary cardiac assist.
computational modeling and advanced imaging protocols, we were
able to
uniquely...
```

11/3,K/158 (Item 3 from file: 444) DIALOG(R)File 444: New England Journal of Med. (c) 2010 Mass. Med. Soc. All rights reserved.

00109496

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## Treatment Of Severe Cardiogenic Pulmonary Edema With Continuous Positive Airway Pressure Delivered By Face Mask (Original Articles)

Bersten, Andrew D.; Holt, Andrew W.; Vedig, Alnis E.; Skowronski, George A.; Baggoley, Christopher J.

The New England Journal of Medicine Dec 26, 1991; 325 (26),pp 1825-1830

Line Count: 00329 Word Count: 04546

## **Text:**

...a carbon dioxide tension above 45 mm Hg while receiving oxygen at a rate of 8 liters per minute through a face mask were enrolled. **Cardiogenic** pulmonary edema was diagnosed when the patient had dyspnea of sudden onset, typical findings on a **chest** film, and widespread rales without a history suggesting **pulmonary aspiration** or infection. In most patients the jugular venous pressure was **elevated** and a third **heart** sound was heard. Patients were excluded if they had a diagnosis of myocardial infarction with shock; a systolic blood pressure below 90 mm Hg; severe...